



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/026,737 | 12/27/2001 | Sammy J. Graham | 8350.1653-00 | 1968 |

7590 03/25/2005

Finnegan, Henderson, Farabow,
Garrett & Dunner, L.L.P.
1300 I Street, N.W.
Washington, DC 20005-3315

EXAMINER

THOMPSON, ANNETTE M

ART UNIT PAPER NUMBER

2825

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

| | | | |
|------------------------------|-------------------------------|-------------------------------|--|
| Office Action Summary | Application No. 10/026,737 | Applicant(s) GRAHAM ET AL. | |
| | Examiner A. M. Thompson | Art Unit 2825 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-9 and 19-27 is/are rejected.
 7) ☒ Claim(s) 10-18 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 03 June 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicants' Amendment to 10/026,737 has been examined. Claims 1, 3, 7, 8, 10, and 19 are amended. Claims 26 and 27 are added. Claims 1-27 are pending.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 27 December 2004 has been entered.

2. Applicants' amendment and remarks have been fully considered and are considered persuasive in part. The pertinent rejections from the previous office action are incorporated herein.

Drawings

3. The drawings are objected to because the Figure 1 replacement sheet of 06/03/2004 should have the drawing figure parallel to the paper boundaries; currently the drawing on the paper is skewed. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be

Art Unit: 2825

removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 10 and 19 are objected to because of the following informalities: Pursuant to claim 10, at line 2, before "when", insert - -which- -' delete "for designing" and insert - -designs- - . Pursuant to claim 19, at lines 5, 8, and 11, revise claim language for clarity to recite "which, when executed by the process, establishes or designs or determines. Claims dependent from the objected to claims are likewise objected to. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-9, 21, 24-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter

Art Unit: 2825

which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicants' specification is directed toward a method for designing a system; the system includes an element. Contrary to what Applicants' specification enables, Applicant now claims a method for designing an element or recites a limitation involving establishing guidelines for designing an element and this is not enabled by Applicants' specification. Claims 1-9, 21-27 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Applicants' invention involves a method of designing a system that includes an element, not a method of designing an element. For examination purposes, the claims are interpreted in accordance with Applicants' specification involving designing a system that includes an element.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-9, 21-27 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Applicants' invention involves a method of designing a system that includes an element, not a method of designing an element. For examination purposes, the claims are interpreted in accordance with Applicants' specification involving designing a system that includes an element.

9. Claims 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

Art Unit: 2825

applicant regards as the invention. Line 2 reference "the system" but it is unclear which system is being referenced.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Rejection of claims 1-9 and 27

11. Claims 1-9 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Pannala et al. (Pannala), U.S. Pub. No. 2003/0079197. Pannala discloses a method and apparatus to generate a wiring harness layout.

12. Pursuant to claim 1, Pannala discloses [a] method of designing a system including an element wherein the element connects a plurality of components (¶¶ 0004 – 0006)), the method comprising establishing a system design including the plurality of components (¶ 21); generating a diagram associated with the system design (¶¶ 21, 22), wherein the diagram includes the element and the plurality of components; establishing guidelines for designing the element (¶¶ 0022, 0026-29), the guidelines including information reflecting attributes of at least one of the system and the element (¶¶ 18, 22, 26); and automatically determining a routing pattern in the system for the

Art Unit: 2825

element based on the diagram and the guidelines (§§ 0021-0027, see especially § 0027).

13. Pursuant to claim 2, wherein the element includes one or more connections (§0018), the determining a routing pattern includes the steps of determining one or more sets of one or more connections that can be bundled (§ 0019); and determining a routing pattern in the element for each bundle (§ 0020).

14. Pursuant to claim 3, further including receiving one or more revised guidelines for designating the structure and determining a revised routing pattern in the system for the element based on the diagram and the revised guidelines (§ 0038).

15. Pursuant to claim 4, further including providing a drawing illustration the structure and the determined routing patterns (§§ 0018, 0021, 0022).

16. Pursuant to claim 5, wherein the step of accessing guidelines for designing the system includes accessing guidelines associated with the system design (§§ 0027-0029).

17. Pursuant to claim 6, wherein accessing guidelines for designing the system includes accessing guidelines associated with the plurality of components and the elements (§§ 0027-0029).

18. Pursuant to claim 7, further including automatically providing information about the designed system (§ 0039).

19. Pursuant to claim 8, wherein automatically providing information includes the step of providing at least one of: a three dimensional drawing of the structure; a two

Art Unit: 2825

dimensional drawing of the structure; a list of components; and a bill of material associated with at least one of the system, the element, and the components (§ 0021).

20. Pursuant to claim 9, wherein the element includes a harness (§§ 0004, 0006, 0030).

21. Pursuant to claim 27, which recites [a] method for designing an element wherein the element connects a plurality of components (§§ 0004 – 0006)), the method comprising establishing a system design including the plurality of components (§ 21); generating a diagram associated with the system design (§§ 21, 22), wherein the diagram includes the element and the plurality of components; establishing guidelines for designing the element (§§ 0022, 0026-29), the guidelines including information reflecting a geometry of the system (§§ 18, 22, 26); and automatically determining a routing pattern in the system for the element based on the diagram and the guidelines (§§ 0021-0027, see especially § 0027).

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Rejection of claim 24

23. Claim 24 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Pannala et al. (Pannala), U.S. Pub. No. 2003/0079197. Pannala discloses a method and apparatus to generate a wiring harness layout including establishing guidelines for

Art Unit: 2825

designing the system. However, Pannala does not explicitly disclose prompting a user to answer one or more questions in establishing the guidelines. Nevertheless, Pannala's use of a user interface with input and output devices suggests the possibility of a system prompt and a user response or entry as could only be accomplished through the use of a terminal. Therefore, it would have been obvious to one of ordinary skill in the art at the time of Applicants' invention that establishing guidelines may be created through system prompt/ user input.

24. Pursuant to claim 24, wherein establishing guidelines for designing the system includes prompting a user to answer one or more questions (§§ 0041-0043).

Response to Remarks

25. Pannala does not disclose establishing guidelines that includes recommendations for routing the element in a system structure. Applicant is encouraged to incorporate this allowable feature into the claim language and work on obviating the newly introduced 35 USC 112 rejections and thereby place this application in a condition for allowance.

Conclusion

26. Any inquiry concerning this communication or earlier communications should be directed to Examiner A.M. Thompson whose telephone number is (571) 272-1909. The Examiner can usually be reached Monday thru Friday from 8:00 a.m. to 4:30 p.m..

27. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2825

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

28. Responses to this action should be mailed to the appropriate mail stop:

Mail Stop _____

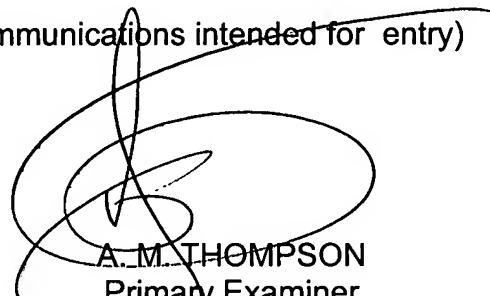
Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306, (for all **OFFICIAL** communications intended for entry)



A. M. THOMPSON
Primary Examiner
Technology Center 2800